

COMPETITION WEEK

Check-In, Monday



Check-in begins Monday morning at 7:00 a.m. and will close at 3:00 p.m. eastern standard time (EST). Show your parking pass to the attendant and proceed to the RMC Check-In Tent located in Parking Lot 4 of the Kennedy Space Center Visitor Complex (KSCVC) and follow the directions to park your vehicle.



All vehicles containing robots and support equipment must be cleared by security. After you are cleared by security you will be provided a temporary placard that will allow one vehicle to proceed through the gate.



You will then proceed to the Astronaut Memorial Foundation's Center for Space Education (CSE) Building (M6-306), where you will drop off your robot and equipment to awaiting team members who have already entered through the park's main entrance.

Teams will then return to Parking Lot 4, return the temporary placard to the RMC check-in tent and then enter through the Kennedy Space Center Visitor Complex (KSCVC) main entrance. Proceed to the RoboPits and check-In with the RoboPit Chief.



REMEMBER TO KEEP THE EMERGENCY LANE CLEAR AT ALL TIMES



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Check-Out, Robots and Equipment

Teams are allowed to take their robots from the RoboPits and out of the Complex, once your robots are checked out, there is no re-entry for the day. To bring your robot back to the Competition, follow the Check-In, Robots and Equipment Tuesday – Friday procedures.

Check-In, Robots and Equipment Tuesday – Friday

Check-in begins each morning at 7:00 a.m. and will close at 9:00 a.m. without exception. Follow the directions to park your vehicle, all vehicles containing robots and support equipment must be cleared by security. After you are cleared by security you will be provided a temporary placard that will allow one vehicle to proceed through the gate to drop off your robot and support equipment in front of the Center for Education. You will then take your vehicle out to Parking Lot 4, return the temporary placard to the RMC check-in tent and enter through the Kennedy Space Center Visitor Complex (KSCVC) main entrance.

Opening Ceremony

Will be held on Tuesday morning from 11 a.m. to noon under the sunshade in front of the Caterpillar Arenas.

College Recruitment Fair

Will be held Thursday from 11 a.m. to 3 p.m. Contact SECOR LLC (Paul@secorstrategies.com) if your school wants to participate in this event designed for high school seniors.

Closing Ceremony

Will be held Friday evening from 7 p.m. to 9 p.m., each team is allocated 10 slots to attend the Ceremony. Guests are not permitted into the Award Ceremony venue.

The RoboPits

The RoboPits are located in the Astronaut Memorial Foundation's Center for Space Education Building M6-306, located adjacent to the west end of the KSCVC.

RoboPit Check in Protocol

Check in with RoboPits Chief. A volunteer will escort the team with the robot to the team pit. The team leader and another representative will remain behind to ensure that the following information has been communicated to and understood by the team.

The RoboPits Chief will require two contact phone numbers, in case the team needs to be reached at any point during the competition and cannot be found. These numbers will not be shared with anyone and will be disposed of at the end of the competition.

- The new layout for the Pits and the overall competition will be described
 - Comm and mechanical inspection locations
 - Travel path from RoboPits to Arena
- RoboPits Chief will give team leader the Comm/Inspection card. The C/P card is used to ensure that all teams have had their 'bot checked out prior to entering the Arena.
 - Either inspection can be performed first, and will not be scheduled, it's first-come, first-served.
 - Return the card when you have passed both inspection and comm check, and when you are ready for a practice run.
 - The RoboPits Chief will schedule you for the next available practice slot
 - Check with the RoboPits Chief before heading to the arena for your practice run, in case of a schedule change
 - Or let the RoboPits Chief know if you are headed to the sandbox and will go from there to the arena

RoboPits:

- If you plan to take your 'bot out with you any evening, check out with the RoboPits Chief.
 - You will need a placard to get through the gate.
 - Check-in the following morning will be 7am-9am, no exceptions.
- Vacuums are provided for the BP-1, they are for use by all teams as needed
 - When you are done using it, please return it to the designated area near the RoboPits Chief
 - If you discover a full vacuum, please alert the RoboPits Chief
- NASA provided carts are for the use of all teams.
 - Priority goes to those teams headed to the Arena for competition, and for teams going to presentations
 - Carts are NOT for use in your pit. Carts are not to be used as platforms for working on the 'bots.
- All pits have power strips provided. **DO NOT DAISY-CHAIN POWER STRIPS.**

Competition:

- The competition schedule will be sent out Tuesday afternoon to the team contact information provided.
- **On competition days teams will be brought to Inspection 45 minutes before the scheduled competition start time.**
 - A volunteer will come to your pit to retrieve you, do not leave without the volunteer.
 - If you are not in your pit at that time you run the risk of forfeiting your competition run.
 - Following the inspection, the volunteer will escort the team to the Arena, where Arena volunteers will take over.
- Presentations and demonstrations:
 - A volunteer will come to your pit to retrieve you approximately 10 minutes prior to your scheduled presentation time, do not leave without the volunteer.

Clean-up and Check-out:

- Each night your pit is expected to be neat, with nothing outside of the pit boundaries.
 - Try to keep your pit and the surrounding area neat and generally clean, use the provided vacuums as necessary.
- Each team is expected to leave their pit as they found it. When you are ready to leave, go to the RoboPits Chief to ask for a volunteer to come inspect your pit.

- Check with the RoboPits Chief no earlier than Wednesday afternoon regarding shipping if you are shipping your 'bot home.
 - There will be a designated area for those 'bots, do not assume it can be left in your pit



The RoboPits are air-conditioned and equipped with restrooms, an eyewash station, hand wash station, bottled water and disposal containers for used aerosol cans, batteries, degreasers and wipes used as cleaners. This is where you will be working on your 'bots, meeting other competitors and after spending months "Designing It" and "Building It", this is where you will step off to the arenas to "Dig It!"

Each pit is equipped with a table, 2 chairs and 2 electrical outlets. The teams are responsible for operating their pit in a safe, clean and responsible manner.





Teams are required to clean their pit and the area around it and meet with the RoboPit Chief to checked-out at the end of the competition. This process must be completed in order to attend the Award Ceremony Friday evening.

Waste Accumulation Containers

Teams will comply with Federal and Kennedy Space Center hazardous and controlled waste program requirements. Regulations requires that you coordinate with the RoboPit Chief before disposing of the items listed below (specially marked containers will be provided):

- Spent aerosol cans, Oily rags, Used oils/lubricants, Acetone
- Scrap metal, PVC primer and cement
- Tote trays for any other chemical products
- Spent batteries will be collected at the Bot Shop

We need your help in following regulations and keeping the Merritt Island National Wildlife Refuge the pristine gateway site to the Florida Birding Trail for the next generation.

Robot Inspections, Communications Inspections, Slide Presentation and Demonstration, Practice Runs and Competition Runs

You are responsible for checking in with the RoboPit Chief for the process and to find out when your team is scheduled to have your robot inspected for volumetric and communications compliance and when you are scheduled to present and demonstrate your team concept and robot. The RoboPit Chief is your only point of contact to coordinate practice and competition runs, things get hectic, be professional.

The Bot Shop

The Bot Shop is supported by David, Jim, James and Otis – from KSC's Prototype Development Laboratory (PDL). The PDL is a team of NASA engineers and engineering technicians whose primary purpose is the design, fabrication and testing of prototypes, test articles and test support equipment. The PDL supports research and technology development laboratories at KSC as well as all of the major engineering programs and projects in development at KSC. You have the privilege of using this resource to make repairs and or modifications to your robots.

Mining Arenas

The arenas measure 7.38m x 3.78m and contain 30cm of regolith simulant over 30cm of icy regolith simulant. Volumetric information on the Caterpillar Mining Arenas is located below in the "On-Site Mining" section of the "Rules and Rubrics" and on the attached diagrams.

Sand Box

The Sand Box is located under in the KSCVC under NASA Central located just south of the IMAX Theater. Teams can test their robots in a silica sand environment and interact with the Park's guests. While you are at this competition you not only represent yourself and your school, you also represent NASA, remember there are little ears around you and your team.